IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

PACIFIC INDEMNITY COMPANY, Plaintiff, v. ALFRED KEMP, Individually and d/b/a KEMP PLUMBING and MARTIN SANDBORG, Individually and d/b/a SANDBORG PLUMBING AND HEATING, Defendants.	:	CIVIL ACTION NO. 04-11975(RWZ) **PLAINTIFF'S MEMORANDUM IN OPPOSITION TO MOTION IN LIMINE TO PRECLUDE TESTIMONY OF PLAINTIFF'S EXPERT THOMAS KLEM**

I. INTRODUCTION

Defendant Kemp's Motion in Limine to Preclude Testimony from Plaintiff's Expert, Thomas Klem (hereafter, "Kemp's Motion;" Document 42) seeks to exclude the proposed testimony of Mr. Klem that was disclosed in Mr. Klem's initial Rule 26 report in July, 2005, nearly 20 months ago, and in a rebuttal report served in March, 2006, almost exactly a year ago. In spite of these extended time frames, and in spite of Kemp's statements in Court filings dating back to May, 2006 (Document 21, Pg. 8, n.1), that it intended to file such a motion, Kemp chose to wait until after 6:00 P.M. on March 20, 2007 or, effectively, three business days before commencement of trial, to file this Motion. This otherwise inexplicable delay would suggest that Kemp's own counsel has a dim view of the prospects for Kemp's Motion, except, perhaps, as a tactical distraction from plaintiff's trial preparation (which it certainly is). It is reasonable to infer that Kemp's counsel believe that the prospects for success on the Motion improve if plaintiff is deprived of the time prescribed under this Court's Local Rules for a response (as it has been), and the Court's time for consideration of the Motion is similarly abbreviated. Plaintiff

would respectfully suggest that an appropriate response to such a heavy-handed tactical ploy would be to deny Kemp's Motion outright. This would in no way prejudice Kemp, since any purported evidentiary issues raised in Kemp's Motion can properly be addressed if, as, and when they arise at trial.

In the event that the Court decides to give any consideration to Kemp's Motion prior to trial, plaintiff will respond as best it can within the extremely limited time which Kemp has deigned to afford plaintiff to formulate and submit a response that the Court might actually have an opportunity to read prior to commencement of trial. The bottom line is that Kemp's attack upon Mr. Klem's opinions and anticipated testimony consist entirely of jury argument (if that, since many of the arguments and assertions lack any proper basis for argument to the jury), areas of dispute between plaintiff's experts and Kemp's experts[1], or potential areas of cross-examination. In short, Kemp's arguments go to the weight, not to the admissibility, of Klem's testimony. None of the arguments raised by Kemp even remotely rise to the level of a basis for exclusion of Kemp's testimony based upon supposedly improper "methodology" under Daubert, and none justify the disruption, delay, and expense that would be associated with Kemp's request for a last-ditch Daubert hearing.

[1] Kemp's designated fire "expert," while perhaps meeting the minimal qualifications under the Federal Rules of Evidence, is thinly-credentialed in that field, and was never on the scene of this fire. §4.4.3.1 of NFPA 921 (2004 Edition)(all references to NFPA 921 in this Memorandum will be to the 2004 Edition, and the text of all such references are attached as Exhibit "C" to the Affidavit of Daniel Q. Harrington in Opposition to Defendant Kemp's Motion in Limine to Preclude Testimony From Plaintiff's Expert Thomas Klem, hereafter, "Harrington Affidavit") states that investigators "should conduct an examination of the scene if it is available." The scene was made available on multiple occasions to Kemp and his investigators, but Kemp has chosen not to designate the investigator who actually conducted the on-scene investigation to testify at trial.

II. ARGUMENT

A. The Results of the Public Sector Investigation Concur With Mr. Klem's Determination That The Fire Originated Beneath The Kitchen Sink Of The Marino Carriage House.

Plaintiff's contention that the fire originated beneath the kitchen sink of the Marino carriage house is supported by evidence independent of and in addition to Mr. Klem's own investigation and analysis of the fire scene and the circumstances of the fire. Plaintiff will introduce the "Fire Investigation Summary Report" on Case No. 2002-117-2011, which was prepared by Sergeant Francis McGinn of the Fire and Explosion Investigation Unit of the Massachusetts State Police (a/k/a the State Fire Marshal's Office). A copy of this report is attached as Exhibit "A." Sergeant McGinn was the lead investigator from the State Fire Marshal's Office.[2] The report is clearly admissible as "factual findings resulting from an investigation made pursuant to authority granted by law" within the meaning of Fed. R. Evid. 803(8)(C):

> Beech Aircraft Corp. v. Rainey, 488 U.S. 153, 109 S.Ct. 439, 102 L.Ed.2d 445 (1988), settled a long-standing conflict among the circuits regarding the admissibility, under Federal Rule of Evidence 803(8)(C), of accident reports containing investigators' conclusions and opinions. The Court held that "statements in the form of opinions or conclusions are not by that fact excluded from the scope of Federal Rule of Evidence 803(8)(C)." Id. at 175, 109
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> S.Ct. at 453. The test for admissibility is two-fold: "As long as the conclusion is [1] based on a factual investigation and [2] satisfies the Rule's trustworthiness requirement, it should be admissible along with other portions of the report." Id. at 170, 109 S.Ct. at 450.

[2] In connection with plaintiff's Rule 26 expert disclosures, plaintiff notified defendant that it might call Sergeant McGinn to testify to his investigation and findings, as set forth in his official report (Exhibit "B").

Lubanski v. Coleco Industries, Inc., 929 F.2d 42, 45 (1st Cir. 1991). As Beech Aircraft and subsequent Circuit Court decisions make clear, such reports carry with them a presumption of trustworthiness and admissibility, with the burden on the opponent to admissibility to present sufficient "negative factors" to overcome the presumption.

There are no "trustworthiness" issues here, since the report is a contemporaneous, first-hand account of the investigation and findings of Sergeant. McGinn, a qualified fire investigator who was charged by law with making those findings. In Green v. Philadelphia Gas Works, 333 F. Supp. 1398, 1405 (E.D. Pa. 1971), decided prior to the adoption of the Federal Rules of Evidence, the court explained the evidentiary value of public sector fire investigation reports in cases like this:

> The plaintiff also contends that the fire marshal's report should not have been sent out with the jury because it overemphasized the fire marshal's theory on the cause of the fire. This report was the official report of this fire stating both the conclusion and the reasons for that conclusion. The fire marshal was an independent, impartial witness who did not receive a fee for making his investigation from any party in this litigation.

[333 F. Supp. at 1405].[3]

Sergeant McGinn's official report concluded that the fire originated under the kitchen sink of the carriage house. The report also concurs that Mr. Kemp's torch was a viable ignition source for the fire, if Mr. Kemp was using his torch on the afternoon preceding the fire's discovery. Sergeant McGinn's report also concurs with Mr. Klem's determination that all other

[3] Kemp's Motion baldly asserts, without any evidentiary basis whatsoever, and despite the detailed analysis and commentary in Mr. Klem's report to the contrary, that Klem first attempted to identify a cause for the fire that had recovery prospects for his client, and only then attempted to come up with an origin and spread scenario which would fit that cause. This baseless assertion is directly refuted by the independent determination by a qualified public official with no axe to grind, whose findings directly support Mr. Klem's position and, of course, directly contradict the contrary arguments of Kemp's designated fire expert, which are parroted in Kemp's Memorandum.

potential ignition sources for the fire, other than Kemp's torch, can be ruled out. As noted in Section C, below, this "process of elimination" methodology for proving the cause of fires is generally accepted in the field of fire investigation and has long been accepted by the courts as an appropriate method of proving the cause of the fire.

B. Klem Used Proper Methodology To Establish That The Fire Originated Beneath The Kitchen Sink Of The Marino Carriage House.

Kemp's attack upon Mr. Klem's determination of the area of origin of the fire can accurately be summarized as follows:

1. fires usually start in the area determined to have suffered the lowest and greatest damage, and spread up and outward from there;

2. there are areas of lower and greater damage than the area of origin determined by Mr. Klem (and Sergeant McGinn); and

3. Mr. Klem's (and, presumably, Sergeant McGinn's) determination of the area of origin of the fire cannot possibly be valid, and therefore cannot even be weighed by the jury.

The problem with Kemp's argument, which corresponds to that of Kemp's designated fire expert, is that it represents a ridiculously simplistic, and therefore inaccurate, approach to well-recognized and well-established principles of fire science, fire behavior, and fire investigation. It elevates one potential indicator of where a fire originates into an immutable rule. The authorities in the field, including those which Kemp itself chooses to cite as authoritative, invariably couch and qualify such statements with terms like "generally," "usually," or "all other things being equal" (See reference to Kirk's Fire Investigation, quoted at Pg. 7 of Kemp's Memorandum)(Document 43).[4]

[4] Kemp similarly attempts to elevate the comments in §6.17.7 of NFPA 921, regarding the significance of the degree of damage to wall studs, to the level of an immutable rule, even though those statements are couched with qualifiers, such as "often" and "in general." §6.1.2 of NFPA 921 expressly states that these are not immutable rules: "the circumstances of every fire are different from every other fire because of

Kemp can attempt to sell this argument to a jury, but anybody with a modicum of experience in fire science and fire investigation knows that there are a multitude of other factors that must be considered in determining whether the area of lowest and greatest damage is the area of origin of the fire, or whether the area of lowest and greatest damage is instead explained by other factors which, as explained below, are specifically referenced throughout NFPA 921, the peer-reviewed publication which all parties concur embodies "reliable" methodology for a determination of the origin and cause of fires.)[5]

The key to the process, and the methodology prescribed by NFPA 921 and followed by Mr. Klem here, is to arrive at and "test" (and, under NFPA 921, "testing" can be and usually is done "cognitively" – in other words, through a deductive process rather than through a physical

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the differences in the structures, fuel loads, ignition factors, airflow, ventilation, and many other variable factors. This discussion, therefore, cannot cover every possible variation in fire patterns and how they come about."

[5] At trial, Mr. Klem will briefly address his role in the development of NFPA 921 and its precursors during the twelve years he was employed as Director of Fire Investigations for the NFPA and, prior to that, his six years as an Investigative Officer for the United States Fire Administration.

reconstruction or laboratory scale experiments),[6] a "hypothesis" that best reconciles all of the known factors.[7]

Mr. Klem's reports explain that the area of lowest and heaviest damage in the kitchen was somewhat to the right of the area beneath the kitchen sink that both Klem and Sergeant McGinn determined to be the area of origin of the fire. As it turns out, one significant problem with the area to the right of the sink is that there are no identifiable or plausible ignition sources which would explain how a fire could have originated at that area.

However, another, much more significant problem, from the standpoint of the approach NFPA 921 prescribes and Mr. Klem took in establishing the origin of the fire, was a unique, directional fire damage pattern Klem observed along a PVC drain pipe which started beneath the kitchen sink and extended to the right, and indicated that the incipient fire spread from the area beneath the sink towards the area of lowest and greatest damage to the right of the sink. (See NFPA 921, §§6.4.1 and 17.1.4 regarding directional damage patterns as indicators of the point of origin). This directional damage pattern could not be reconciled with the fire originating in the area of lowest and greatest damage. In compliance with §§4.3.6 and 17.1.2 of NFPA 921, since

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[6] See NFPA 921 §4.3.6. In United States v. Black Wolf, 1999 U.S. Dist. LEXIS 20736 (S.D.D. 1999)(attached as Exhibit "D"), the court noted the inapplicability of most of the Daubert factors, including the "tested" and "testability" factor, to he field of fire origin and cause and determination. With specific regard to the "testing" factor, the court noted that the expert "does not seek to offer testimony about an untested novel concept such as might be found in a case involving presentation of purely cutting-edge scientific testimony." Other federal decisions applying the Daubert criteria in fire cases have similarly recognized that "deductive reasoning" satisfies the "testing" criterion. Bitler v. A.O. Smith Corp., 394 F.3d 1114 (10th Cir. 2004); Allstate Ins. Co. v. Hugh Cole Builder, 137 F. Supp.2d 1282, 1289 (M.D. Ala. 2001); Torske v. Bunn-O-Matic, 2004 U.S. Dist. LEXIS 14570 (D.N.D. 2004)(attached as Exhibit "E"); Erie Ins. Exchange v. Applica Consumer Products, 2005 W.L. 1165562 (M.D. Pa. 2005)(attached as Exhibit "F").

[7] Kemp repeatedly castigates Klem's use of the term "hypothetical ignition scenario," even though the formulation and evaluation of "hypotheses" is the procedure that is specifically prescribed under NFPA 921. (§§4.3.5 and 4.3.6).

a hypothetical area of origin at the area of lowest and greatest damage could not be reconciled with the directional damage pattern on the PVC pipe, Klem was required to "discard" the area of lowest and greatest damage as the hypothetical area of origin, and then develop and cognitively test a different hypothetical area of origin located beneath the kitchen sink, which did fit the known facts. Applying the scientific method as prescribed in §4.3 of NFPA 921, and cognitively testing a hypothetical area of origin against all known facts, the area of lowest and greatest damage to the right of the sink could be reconciled with the fire originating beneath the sink, because the area beneath the sink had an opening which readily accessed a large, combustible concealed void space behind the area of lowest and heaviest damage,[8] particularly because of an access channel to that concealed void space that was afforded by the horizontal path of the PVC drain pipe behind the wall, and the presence of a ignitable, thermoplastic[9] polyethylene vapor barrier.[10] The combustible, concealed void space, with its limited air supply, afforded a logical and likely location for the fire to smolder for many hours, until it finally broke out into open burning with access to free oxygen in the atmosphere. (See NFPA 921, §5.1.2.4.2, which states that smoldering can transition to open burning due to airflow).[11]

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8 The impact of this concealed void space on the development and spread of this fire is supported by the following passage from §7.4.5 of NFPA 921: "Concealed spaces provide a hidden path for fire to grow or spread without being identified early in the event. By the time fire moves out of the concealed space, it often has already spread extensively throughout the structure."

9 Klem's characterization of the burning characteristics of the thermoplastic polyethylene vapor barrier are supported by the definition of "thermoplastic" in NFPA 921, §3.3.154, as well as by his firsthand observations.

10 Mr. Klem's rebuttal report points out that the PVC channel would foster horizontal (or, "fuse like") spread of the fire, addressing Kemp's "common sense" (but otherwise unsubstantiated) argument that the polyethylene supposedly would only burn vertically.

11 Klem explains that the long-term, low-level smoldering and burning occurred because of the limited ventilation (i.e., air supply) in the concealed spaces. The occurrence of smoldering in such "ventilation controlled" circumstances is well-recognized in NFPA 921 and other authoritative sources, and Kemp's report cites

Another item of information referenced in Mr. Klem's reports that can only be reconciled with a fire developing initially in the combustible, concealed space identified by Mr. Klem are photographs taken shortly after the fire's discovery, which show fire largely confined to the kitchen on the first floor, but with extensive involvement of a dormer on the second floor above the kitchen. Because of the unique construction features of the Marino carriage house, there was, in the parlance of fire investigators, direct "communication" (i.e., avenue for fire spread) between the combustible, concealed space behind the kitchen wall and the dormer, but no such "communication" between the kitchen itself and the dormer. If the fire had developed somewhere other than in the combustible, concealed space (which, as noted previously, communicates directly with the opening beneath the kitchen sink where Mr. Klem determined that the fire started) there would have been much more extensive fire involvement on the first floor of the building before the dormer became involved.

Of course, the kitchen eventually become involved in the fire when the fire finally broke through the combustible, concealed spaces into open burning, and even moreso because of the collapse of portions of the second floor into the kitchen. Thus, the kitchen sink cabinet area is not only the location where, as plaintiff alleges, Mr. Kemp touched off the fire with his torch (See Section C, below), but was also among the "victims" of what was eventually a well-developed kitchen fire. However, while the fire started beneath the kitchen sink, most of its development during the earlier stages prior to open burning occurred in the concealed structure to the right of the sink, thus explaining why that area would have suffered more extensive fire

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other examples of smoldering in ventilation-controlled situations. (See NFPA 921, §§3.3.161, 5.1.2.1.2, 5.1.2.2.1, 5.1.2.4.2, 5.5.4.2.4). Klem also cites two references, the Fire Protection Handbook and the Principles of Fire Behavior, which similarly address the occurrence of smoldering in ventilation-limited situations. None of defendant's experts have disputed the concept of long-term smoldering occurring in concealed areas, nor could they credibly do so, given the explicit support for this phenomenon throughout NFPA 921 and other sources.

damage than the area of the sink cabinet.[12] Klem's fire ignition and spread scenario, which best fits the physical and circumstantial evidence, does not presuppose extensive, long-term burning at the early stages of the fire within the sink cabinet itself.

NFPA 921 notes numerous other factors, which clearly also came into play here, which would further explain why other areas of the kitchen suffered greater damage than the sink cabinet. This includes "Fall Down (Drop Down)," referenced at §6.16.5.2 of NFPA 921, in which "burning debris often falls to lower levels and then burns upward from there." As noted in §6.16.5.2, "Fall Down can ignite other combustible materials, producing low burn patterns that may be confused with the area of fire origin." In this case, the kitchen sink was located beneath a window. On either side of the window were large, wall-mounted wooden cabinets which, again in the parlance of fire investigators, represented significant "fuel packages" for the well-developed fire in the kitchen, and would both be a source of "drop down" damage on either side of the kitchen sink cabinet, and also foster the destruction and collapse of the second floor structure located above the cabinets.

Further, Mr. Klem's report explains that, prior to discovery of the fire, "flashover" had occurred in the kitchen which, as noted in §6.19.1, can result in damage patterns extending "to the base of the wall," with potential unevenness in the patterns resulting from ventilation effects (the area of origin, as noted previously, was directly beneath the large window, which shattered prior to the fire's discovery), suppression activities, and protected areas. §6.2.5 further elaborates on "Patterns Generated by Full Room Involvement" (i.e., flashover) which include extensive damage "at low levels in the room down to and including the floor," subject, again to

[12] §§6.3.1.1 and 6.3.1.2 counsel that the investigator should, as Mr. Klem did, consider multiple variables, including suppression activities, ventilation, "and the amount of time that the material was exposed to the heat," and that "a particular material may display the same heat exposure patterns from exposure to a low-temperature heat source for a long period of time as to a high-temperature heat source for a shorter period of time."

"the effects of protected areas." §6.2.5 further notes that "the extreme conditions of the full room involvement can produce major damage in a few minutes, depending on ventilation and fuels present."

These are but a few of the references to relevant conditions in this fire, documented in Klem's reports, which according to NFPA 921, preclude reliance exclusively upon the area of lowest and heaviest damage as necessarily indicating the area of fire origin. By channeling Kemp's expert's fatally simplistic analysis of the evidence, Kemp merely highlights the expert's apparent lack of a sophisticated understanding of fire dynamics and fire behavior. Each aspect of Klem's methodology, opinion, and analysis is, therefore, supported by the provisions of NFPA 921, a peer-reviewed publication which Kemp concedes to be an authoritative expression of "reliable" methodology in the field. Daubert requires nothing more.

C. Plaintiff's Experts Utilized Proper Methodology To Establish The Cause Of The Fire.

As noted previously, Kemp's assertion that Mr. Klem first improperly identified a cause for the fire, then "backed into" the area of origin is baseless. Mr. Klem properly determined that the fire originated under the sink and, only then, by a process of elimination,[13] identified Mr. Kemp's torch as the only plausible ignition source for the fire. As not just Mr. Klem, but also Dr. Eagar, a metallurgist, and Lester MacLaughlin, a plumber with fire investigation

[13] Donald Galler, plaintiff's electrical engineering expert, rules out any potential electrical cause for the fire in the area of origin. Kemp criticizes Mr. Galler, because Mr. Galler did not look for potential electrical causes outside the area of origin determined by Mr. Klem and Sergeant McGinn. This criticism is puzzling since, as Kemp acknowledges, orthodox fire investigation methodology calls for establishment of an area of origin first, and only then analysis of potential causes within the area of origin. It would turn the investigation process on its head if an electrical engineer were expected to search for potential causes outside a defined area of origin. In fact, without a defined area of origin, which a fire investigator would have to establish, an electrical engineer typically would be unable to establish whether electrical faulting was the cause or a result of a fire.

experience, will explain, physical evidence recovered from the scene of the fire -- physical evidence which possesses neither the motive nor the capability of lying -- establishes that Mr. Kemp used his torch to unsolder plumbing joints beneath the kitchen sink of the carriage house on the afternoon preceding the fire. As summarized in the Memorandum in Support of Plaintiff's Motion in Limine (Document 17, Pp. 1-2), Mr. Kemp first realized, late in the afternoon preceding the discovery of the fire, that he was going to have to use the torch that he had with him in the carriage house that day to unsolder and remove certain valves, piping and fittings he had installed beneath the sink in order to accommodate the installation of a garbage disposal. One of the items Mr. Kemp admits that he was going to have to unsolder was a cold water shut off valve. After the fire, this cold water valve assembly was found, unsoldered at both ends, lying loose on the bottom of the remains of the kitchen sink cabinet.

Plaintiff's experts will explain that the only way that this cold water valve assembly could have become unsoldered at both ends and ended up on the bottom of the sink cabinet is if it was deliberately unsoldered with a torch, and that the valve assembly could not possibly have become unsoldered and then repositioned itself in the bottom of the sink cabinet as a result of exposure to the fire (See Exhibit "B" to Document 16). Following the fire, the copper tube, or "riser," to which the valve had originally been soldered still had an unmelted ridge of solder around its circumference at the base of the original location of the cold water valve. If the valve/riser solder joint had melted from the general heat of the fire, the solder ridge on the riser immediately adjacent to the valve would have melted, as well.[14]

[14] If, notwithstanding plaintiff's pending Daubert motion (Document 26), the jury is allowed to hear Kemp's expert's explanation of how the valve supposedly could have melted off in the fire, while keeping the solder ridge intact, plaintiff expects the jury to readily recognize the theory as unscientific, unsupportable nonsense concocted to get a desperate client off the hook.

Moreover, even if it were physically possible for the valve/riser joint to somehow be exposed to sufficient heat from the fire to melt the solder joint, but not melt the immediately adjacent solder ridge, there is no plausible explanation of how the valve assembly would have ended up in the bottom of the sink cabinet. Kemp's expert theorizes (without offering any test data to support the theory) that if the valve/riser solder joint melted in the fire, water pressure or, perhaps, steam pressure would then cause the valve to pop up off the riser. However, in conformance with the dictates of the scientific method, Daubert, and Fed. R. Evid. 702, Dr. Eagar tested this theory, and established that if the pressurized[15] valve/riser solder joint is melted in a fire, the joint simply develops a small leak, which relieves the pressure on the joint, while the leaking water cools and strengthens the joint, and the valve remains in place (See Exhibit "B" to Document 16). On the other hand, when Dr. Eagar unsoldered valves with a torch, it produced "ridges" of solder very similar to the ridge on the pipe from beneath the kitchen sink of the carriage house.

Finally, numerous other soldered joints beneath the kitchen sink that were configured identically to the cold water valve assembly joints survived the fire intact, even though they were in close proximity to the joints which were unsoldered, and experienced identical fire conditions.

The physical and circumstantial evidence thus establishes that Mr. Kemp's denial that he was using a torch beneath the kitchen sink on the afternoon preceding the fire is simply not true. It is Hornbook law that circumstantial evidence is entitled to no less weight than direct evidence. IA, Wigmore on Evidence, §26 (Tiller Revision 1983); Holland v. United States, 348 U.S. 121, 139-140, 75 S.Ct. 137, 138 (1954). In fact, while each type of evidence has its relative advantages and disadvantages, one of the relative advantages of circumstantial evidence is that it

[15] The same physical and circumstantial evidence which established that Mr. Kemp removed the cold water valve prior to the fire also establishes that Mr. Kemp shut down the water supply to that valve. However, plaintiff's expert conducted the test using the same hypothetical assumptions used by defendant's expert.

presents fewer, if any, concerns regarding witness bias, motivation, recollection and perception. Wigmore, supra.[16] Federal courts have long recognized the importance and utility of circumstantial evidence in fire cases, since fires, by their nature, tend to destroy and consume direct evidence of their cause. Gichner v. Antonio Troiano Tile and Marble Co., Inc., 410 F.2d 238, 247 (D.C. Cir. 1969); Commercial Union Insurance Co. v. Basfield, 832 F. Supp. 234, 236 (C.D. Ill. 1993) (explaining that "because all direct evidence is often destroyed, fire experts often must rely on circumstantial evidence in determining the cause of a fire").

When a court exercises its "gatekeeping" function to evaluate a fire expert's proposed testimony under Daubert, the court "must evaluate the methodology used by the proposed expert in determining whether or not to admit his or her testimony, not his or her conclusions. It is the jury's responsibility to evaluate the expert's conclusions and to weigh this evidence against the evidence presented by other witnesses and on-site investigators." Cortland Racquet Club v. Oy Saunatec, Ltd., 2003 W.L. 1108740, *4 (S.D.N.Y. 2003). All parties have embraced NFPA 921 as the embodiment of generally accepted methodology in the field of fire investigation. Federal courts evaluating fire expert methodology frequently refer to NFPA 921. See e.g. Travelers

[16] Contrary to the statement in Kemp's Memorandum, plaintiff's theory in this case does not presuppose that "all" of the witnesses who have testified in this matter are lying. Plaintiff's theory is consistent with the testimony of all of the witnesses, except Mr. Kemp and, perhaps, Mr. Sandborg, who are the two witnesses who happen face a $2 Million plus judgment, if the jury finds for plaintiff. Incidentally, in a recorded statement taken on April 17, 2003, Sandborg's employee, Philip Shields, admitted that Mr. Kemp was using his torch on the day before the fire was discovered, but was then overruled by his boss, Mr. Sandborg. Moreover, the physical evidence and Sandborg's employee's admission are not the only evidence that Kemp used a torch beneath the kitchen sink of the carriage house on the afternoon of December 9, 2002. Martin Sandborg claims to have inspected inside the kitchen sink cabinet on the afternoon of December 19, and has also testified that he never saw any evidence that Kemp had scorched a cabinet with a torch. However, after the fire, Sergeant McGinn and Mr. Klem both observed that the remains of the cabinet had been scorched with a torch, establishing that Kemp did use his torch beneath the sink late in the afternoon of December 19, after Sandborg says he inspected it.

Property & Casualty Corp. v. General Electric, 150 F. Supp.2d 360, 366 (D. Conn. 2001)(referring to NFPA 921 as "a peer reviewed and generally accepted standard in the scientific community"); U.S. v. Black Wolf, 1999 U. S. Dist. LEXIS 20736, *12-13 (D.S.D. 1999)(attached as Exhibit "D"). §18.2.1 of NFPA 921 specifically endorses the "process of elimination" methodology employed by Sergeant McGinn and Mr. Klem in this case:

> **18.2 Process of Elimination**
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> 18.2.1 Any determination of fire cause should be based on evidence rather than on the absence of evidence; however, when the origin of a fire is clearly defined, it is occasionally possible to make a credible determination regarding the cause of the fire, even when there is no physical evidence of the ignition source available. This finding may be accomplished through the credible elimination of all other potential ignition sources, provided that the remaining ignition source is consistent with all known facts.

The "process of elimination" methodology has been approved by the First Circuit in other cases involving fire origin and cause determination, as well as in the context of other expert testimony. U.S. v. Diaz, 300 F.3d 66, 76 (1st Cir. 2002) (upholding admission of expert testimony as to the cause of a fire which was based upon evaluation of burn patterns at the fire scene and elimination of "alternate explanations for the cause of the fire"); Baker v. Dalkon Shield Claimants Trust, 156 F.3d 248, 252-253 (1st Cir. 1998) (holding that district court erroneously excluded proof of medical causation through expert's "differential diagnosis"). Indeed, numerous federal decisions, both pre and post-Daubert, have endorsed the "process of elimination" method of determining the cause of a fire. "Where a fire investigator identifies the cause of the fire in terms of probabilities (as opposed to mere possibilities) by eliminating all but one reasonable potential cause, such testimony is highly probative." Breidor v. Sears Roebuck and Co., 722 F.2d 1134, 1138 (3d Cir. 1983); Gichner, supra; Cortland Racquet Club, supra. Moreover, "plaintiff's burden of proof does not require him to eliminate every other possible cause of the fire, however. Rather, he is merely required to demonstrate that it is reasonably

probable that the fire occurred" in the fashion alleged. Talkington v. Atria Reclamelucifers Fabrieken BV, 152 F.3d 254, 266 (4th Cir. 1998).

As the cases cited above suggest, courts deemed the "process of elimination" approach to fire cause determination as "generally accepted" methodology in the field long before the adoption of Fed. R. Evid. 702 and the Daubert decision supplanted the Frye "generally accepted" standard. Gichner, supra; Breidor, supra. As the Daubert decision itself recognized); Fed. R. Evid. 702 expanded and liberalized the standard for admission of expert testimony from the more stringent "generally accepted" standard set forth in Frye v. U.S., 293 F. 1013, 1014 (D.C. Cir. 1923). See e.g. Borawick v. Shay, 68 F.3d 597, 610 (2d Cir. 1995), cert. denied, 517 U.S. 1229 (1996); Cavallo v. Star Enterprises, 100 F.3d 1150, 1158 (4th Cir. 1996) cert denied 118 S. Ct. 684 (1998); U. S. v. Dorsey, 45 F.3d 809, 813 (4th Cir.) cert denied 515 U. S. 1168 (1995). It would therefore be anomalous if expert methodology that was deemed "generally accepted" during the Frye era was now subject to exclusion under the regime of Daubert and Fed. R. Evid. 702.

As the following passages from NFPA 921 make clear, a fire investigator is not required to accept self-serving statements by witnesses with obvious bias or motivation to fabricate as "known facts" which must control the determination of the cause of a fire, especially when those self-serving statements are directly contradicted and refuted by physical evidence -- which evidence possesses neither the motivation to lie nor the capability of lying. To the contrary, the investigator has the duty to evaluate the source and reliability of such statements, and to weigh the statements against other evidence, including irrefutable physical evidence.

> 13.1.2.1 Generally, any information solicited or received by the fire investigator during a fire investigation is only as reliable as the source of that information. As such, it is essential that the fire investigator evaluate the accuracy of the information's source. Certainly, no information should be considered to be accurate or reliable without such an evaluation of its source.

> 13.1.2.2 This evaluation may be based on many varying factors depending on the type and form of information. These factors may include the fire investigator's common sense, the fire investigator's personal knowledge and experience, the information source's reputation, or the source's particular interest in the results of the fire investigation.
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> 13.4.1.2 It is the responsibility of the investigator to evaluate the quality of the data obtained from the witness at the time of the interview.
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> 17.1.2 In some instances, a single item, such as an irrefutable article of physical evidence or a dependable eyewitness to the initiation, can be the basis for a conclusive determination of origin. In most cases, however, no single item is sufficient in itself. The investigator then should use all of the available resources in developing potential scenarios and determining which scenarios plausibly fit all of the evidence available. When an apparently plausible scenario fails to fit some item of evidence, it is critical that the investigator determine whether the scenario or the evidence is erroneous.

In Connelly Containers, Inc. v. Pennsylvania Railroad, 222 Pa. Super. 7, 292 A.2d 528 (1972), the court upheld the submission to the jury of a theory that a fire was caused by welding inside of a boxcar six days prior to the outbreak of the fire, even though the defendant denied welding inside the boxcar, where plaintiff's expert relied upon physical evidence which contradicted this denial.

Similarly, in this case, plaintiff's experts' methodology is properly based upon circumstantial and physical evidence, which happens to contradict the defendants' self-serving statements. The jury is entitled to consider plaintiff's experts' opinions, and the circumstances and evidence upon which those opinions are based, and to weigh that information against any contradictory testimony. From a practical standpoint, any contrary ruling would effectively

preclude proof of a circumstantial case in the face of a defendant's denials, and deprive plaintiffs of the opportunity to have a fact-finder evaluate the veracity of those denials.

Plaintiff's experts' opinions indisputably conflict with the testimony of Mr. Kemp and, perhaps, that of Mr. Sandborg, the two defendants in this case. However, as outlined above, plaintiff's experts' opinions are not derived from whimsy or caprice. Instead, they are based upon physical evidence which, plaintiff maintains, the jury will find to be more reliable, more compelling, and less subject to credibility issues such as motive, bias, recollection, and perception than is the self-serving testimony of these two interested parties. Indeed, if the jury understands and accepts plaintiff's experts' explanation of the physical evidence, it will have no choice but to reject the defendants' self-serving denials.

Respectfully submitted,

DATE: 3/22/07

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and accurate copy of Plaintiffs' Memorandum in Opposition to Motion in Limine To Preclude Testimony of Plaintiff's Expert Thomas Klem was forwarded via electronic notification of filing on the 22rd day of March, 2007, to the following:

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